

## Your Annual Water Report

We are pleased to provide you with the 2013 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water. Our three wells draw from the Patapsco aquifer in Anne Arundel County. An aquifer is a geological formation that contains water.

We are pleased to report that our drinking water meets all federal and state requirements.

Source Water Assessment – The Maryland Department of the Environment has completed a draft source water assessment for the water systems using confined aquifers in Anne Arundel County. This assessment was based on existing data, geologic reports, sanitary surveys, field inspection and monitoring data. It was determined that the Provinces water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring cadmium and iron, both of which are being removed from the raw water through treatment. If you would like to review the report or have any other questions or concerns regarding it please call our office at (800) 272-1919.



Help put a stop to the more than **1 trillion gallons of water lost annually** due to household leaks. These easy-to-fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year.

Plumbing leaks can run up your family's water bill an extra 10 percent plus, but chasing down these water- and money-wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

### Message From Lisa Sparrow, President and CEO

Dear Provinces Utilities Customers,

I am pleased to share your Annual Water Report for 2013. The report will provide you with useful conservation tips, a new section on how to keep your drains running clear, clear definitions of the key measures used to assess water quality as well as the critical data itself.

We are committed to providing safe, reliable and cost effective service to our customers. And, all of our employees share in our commitment to act with integrity, protect the environment, and enhance the local communities, like yours, that we serve.

**We are proud to share this report which is based on water quality testing through December 2013. You will find that we supply water that meets or exceeds all federal and state water quality regulations.**

These results don't happen by chance. A dedicated local team of water quality experts are responsible and accountable for insuring that our customers are our top priority and for providing the highest quality drinking water and service now, and in the years to come.

Best regards,



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**The Safe Drinking Water Act** was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

### **EPA Wants You To Know:**

The sources of drinking water; both tap water and bottled water; include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (i) Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (ii) Inorganic contaminants, such as salts and metals, that may be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (iii) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (iv) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- (v) Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

**Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Provinces Utilities, Inc. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The Environmental Protection Agency requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables below are the only contaminants detected in your drinking water.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.



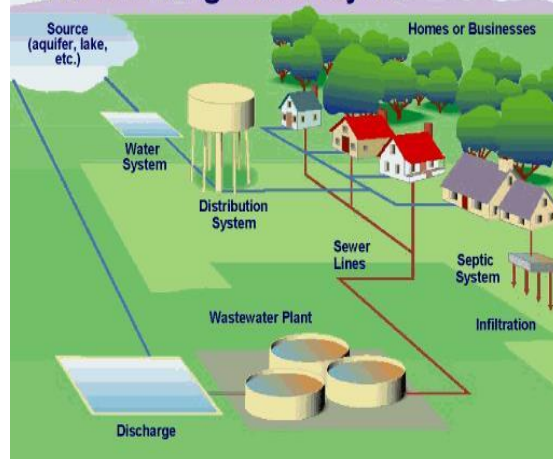
**We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.**

**Drain Disposal Information:** Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

**Prescription Medication and Hazardous Waste** - Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Don't flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: <http://www.epa.gov/epawaste/conserve/materials/hhw.htm>

### **The Drinking Water Cycle**



**Understanding This Report:**

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- Action level (AL) – action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Standard units (S.U.) – standard units is a measurement of that particular regulated contaminant.
- Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular Rule.
- Parts per million (ppm) or milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- Picocurie per liter (pCi/L) - measure of the radioactivity in water.
- Maximum contaminant level (MCL) - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

Provinces Utilities, Inc routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the tables that follow show the results of our monitoring for the period of January 1st to December 31st, 2013. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, are more than one year old. Data obtained before January 1, 2013, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

**If You Have Questions Or Want To Get Involved?**

Provinces Utilities, Inc. does not currently hold regular public meetings. Should the Utility hold a public meeting, you will be notified through the mail or public notice. Please call customer service at (800) 272-1919 if you have any questions. We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future

**WATER QUALITY TEST RESULTS****Inorganics Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water AVG.	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	2012	No	0.53	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

**Lead and Copper Contaminants**

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water AVG.	# of exceeding sites	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90th percentile)	2011	No	0.056	0	1.3	AL= 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## WATER QUALITY TEST RESULTS

### Radiological Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters (pCi/l)	2013	No	7.1	0	50*	Decay of natural and man-made deposits
Alpha emitters (pCi/l)	2013	No	9	0	15	Erosion of natural deposits
Combined radium (pCi/l)	2013	No	2.6	0	5	Erosion of natural deposits

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

### Disinfectants & Disinfection By-Product Contaminants

Contaminant (units)	Date	MCL/ MRDL Violation Y/N	Your Water Average	Range Low High	MCLG	MCL	Likely Source of Contamination
Chlorine (ppm)	2013	No	1.2	0.6-2.0	MRDLG = 4	MRDL = 4	Water additive used to control microbes
HAA5 [Total Haloacetic Acids] (ppb)	2013	No	1.19	ND-2.38	N/A	60	By-product of drinking water chlorination
TTHM Total Trihalomethanes (ppb)	2013	No	2.19	1.07-3.31	N/A	80	By-product of drinking water disinfection

Secondary Contaminants are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

### Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water AVG.	Range Low/High	Secondary MCL
Sodium (ppm)	2012	2.6	N/A	N/A

Our system received monitoring waivers for: cyanide, nitrite, asbestos, and combined uranium.